

Remarks

Applicants have amended the specification to remove a typographical error on page 4. Specifically, the bead of material 17 was erroneously referred to as the bead of material 20. The bead of material was clearly found in two lines above as being reference numeral 17. Accordingly, Applicants are submitting this amendment to correct the typographical error.

With this change, Applicants respectfully submit that the rejection under 35 U.S.C. § 112 is overcome. There are only two beads of material. The first bead is reference number 17 and the second bead is reference numeral 23. The specification and drawings are clear that there are two different beads of material and Applicants respectfully submit it is clear and concise and overcomes the objection set forth in paragraph 2 of the Office Action.

In paragraph 5, the Examiner is raising a double-patenting issue. This matter was not discussed during the interview with the Examiner on October 21, 2009. Applicants believe that with the distinctions discussed with respect to the Harrold patent, as well as recitation of extruding a bead onto a substrate (which is not claimed in the co-pending application number 11/668,768) this rejection is no longer appropriate. If after reviewing this amendment, the Examiner is still of the opinion that a double patenting rejection is appropriate, Applicants will file a suitable terminal disclaimer.

Turning now to the rejection based on the prior art, the independent claims 1 and 11 stand rejected under 102(e) and independent claim 7 stands rejected under U.S.C. 103(a). The Harrold '634 patent describes a substantially different process than that of the present claimed invention. In stations A, B and C, the strip 12, or outer tube, is formed. Then at station D, a bead of material is extruded to form the secondary flow paths on a "form wheel" (as opposed to on a substrate). Then, in column 10, line 21, it notes that the continuous bead 186 on the form wheel is cooled and then added to strip 12. However, it is necessary that strip 12 be reheated to attach the cooled bead 186.

Therefore, Applicants submit that there is no process shown, described or suggested in the prior art which provides for the extrusion of a bead of material onto a substrate, which has been extruded, and then forming the flow path on the extruded substrate. The Harrold patent discloses at column 10, line 47, the use of a belt 198. The substrate of the present claimed invention acts as the equivalent of the belt 198 and therefore, the Applicants are able to eliminate this equipment.

It can therefore be seen that there is no forming of a flow path on a strip. It is formed on a form wheel. By forming the flow path on a substrate, the present application can proceed at a much faster speed than the prior art and also saves in secondary cooling and slitting operations. The substrate of the present claimed invention is what holds the continuous strip onto the forming wheel and does not utilize a belt 198 as in the prior art.

Applicant respectfully submits that all the independent claims 1, 7 and 14 are not shown or described in the prior art for the reasons noted above and are therefore patentable. Accordingly, Applicants submit that the dependent claims are also therefore allowable for the reasons noted above.

Claims 4 and 14 have been rejected under 35 U.S.C. 103(a). The Examiner states that Harrold discloses a method where the second temperature of the substrate is cooled. However, it should be noted that Applicants are cooling the substrate on which the secondary flow path is extruded. There is no equivalent substrate in the Harrold patent. Accordingly, Applicants submit that there can be no teaching or suggesting that the substrate of the present claimed invention being cooled to these temperatures is obvious.

Still further, with respect to claims 3 and 8, there is no teaching of a plurality of protrusions being formed for the purpose of enhancing heat transfer. Applicants respectfully request reconsideration and allowance of all the claims remaining in the application. If the Examiner has any questions, the Examiner is respectfully requested to call the undersigned at 612.331.7415.

Respectfully submitted,

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